

REMARKS

Claims 1 and 3-17 are pending. Claims 1, 4, 6, 10 and 17 have been amended. Claim 2 has been cancelled without prejudice. Claim 1 is the only independent claim.

Claims 1 and 17 were rejected under 35 U.S.C. § 102(b) over U.S. Patent 5,247,598 (Takimoto et al.). Claims 3, 9 and 11 were rejected under 35 U.S.C. § 103 over Takimoto et al. Claims 2, 4, 10 and 12 were rejected under 35 U.S.C. § 103 over Takimoto et al. in view of U.S. Patent 5,295,219 (Koya et al.). Applicants submit that amended independent claim 1 is patentable over the cited references for at least the following reasons.

Amended Claim 1 recites, inter alia, that a longitudinal groove of an optical fiber coupler reinforcing member has an U-shaped cross-section, an exterior bottom surface of a shaft member of the optical fiber coupler reinforcing member is a flat surface along the longitudinal direction thereof, and a shape in cross-section of the shaft member is a polygonal shape which inscribes a circle. Support for these amendments can be found in the specification on page 8, lines 6 to 13, and at the description of the original claim 2, as well as the disclosures of FIGS. 1 to 3, of the present application.

In an optical fiber coupler reinforcing member having the above features, since the longitudinal groove has a U-shaped cross-section, even when external pressure is applied on the optical fiber coupler reinforcing member, that force does not become concentrated on specific parts of the longitudinal groove and is spread over an entire inner wall surface of the longitudinal groove, making it possible to prevent damage to the optical fiber coupler reinforcing member.

Further, an adhesive for fixing the optical fiber coupler in the longitudinal groove can equally be filled in the longitudinal groove since the longitudinal groove has no corners in a cross-sectional direction. Also, since the shaft member comprises a flat bottom surface

running longitudinally, the processing of the shaft member is easier compared with one in which the exterior of the whole is curved, and it is possible to keep the shaft member stationary on a flat work bench.

In addition, since the shape in cross-section of the shaft member is a polygonal shape which inscribes a circle, it is possible to stably and easily house the optical fiber coupler reinforcing member in a cylindrically shaped casing.

In contrast, Takimoto and Koya do not disclose the abovementioned features of the present application. Takemoto shows a rectangular-shaped member having a square bracket-shaped groove in cross-section and a half cylindrical-shaped member having a semicircular groove in cross-section. Koya shows a cylindrical member having a circular cross-section, as the optical fiber coupler reinforcing member.

The optical fiber coupler reinforcing member in which the inner and outer shapes of the member in cross-section are different, is not disclosed in Takemoto and Koya. Furthermore, when the groove having a semicircular cross-section, such as is disclosed in Takemoto, is used for fixing the optical fiber coupler, it is difficult to provide the optical fiber coupler on the predetermined position in the groove compared with one which uses a U-shaped cross-section. This is because the semicircular groove in cross-section is relatively shallow compared with one having a U-shaped cross-section, and does not have a member for supporting the optical fiber coupler such as the perpendicular side walls of one having a U-shaped cross-section, such as is recited in claim 1.

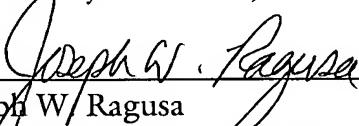
As is clear from the foregoing, neither of the cited references teach or suggest the salient features of amended claim 1 discussed above. Claim 1 is therefore patentably distinguished from those references and is believed to be in condition for allowance.

The other claims in this application are each dependent from the independent claim discussed above and are therefore believed patentable for the same reasons. Since each dependent claim is also deemed to define an additional aspect of the invention, however, the individual reconsideration of the patentability of each on its own merits is respectfully requested.

In view of the above amendment and remarks, applicants believe the pending application is in condition for allowance.

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Respectfully submitted,

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